

In the Claims

CLAIMS

1. (Currently amended) A multimedia information processing device in which content information, such as still image data, audio data, text data and movie image data, having non-layered structures, layered structures or structures in combination therewith is formed to have a layer structure, deleted, restored or added, said device comprising:

an internal structural information generator for generating internal structural information by analyzing internal structures of said content information having layered structures or non-layered structures; and

an operation process information generator for generating operation process information by analyzing, editing and processing contents of said content information having layered structures or non-layered structures.

2. (Original) The multimedia information processing device according to claim 1, which further comprises an integrating means for integrating said content information, said internal structural information, and said operation process information.

3. (Original) The multimedia information processing device according to claim 2, which further comprises a separating means for separating the information integrated by said integrating means into said content information, said internal structural information, and said operation process information.

4. (Original) The multimedia information processing device according to claim 3, in which said separating means further separates operation instruction information which relates to operation instructions.

5. (Original) The multimedia information processing device according to claim 1, in which said internal structural information includes at least anyone of layered structural information of said content information having the layered structure or non-layered structure, combination information of said content information having a plurality of non-layered structures, and structural combination in formation of said content information having the layered structure and non-layered structure.

6. (Original) The multimedia information processing device according to claim 1, in which said operation process information includes at least anyone of a genre of said content information, a lapse of time from generating said content information, a service class of said content information, a system load of said content information, an information storage capacity of an external memory device, a network load, and a utilization frequency of said content information.

7. (Original) The multimedia information processing device according to claim 1, which further comprises:

an internal structural information checking means for checking said internal structural information;

an operation process information checking means for checking said operation process information;

a content information editing and processing means for deleting, restoring or adding a partial data of said content information based on results checked by said internal structural information checking means and said operation process information checking means;

an internal structural information analyzing and updating means for analyzing said internal structural information of said content information and updating said internal structural information; and

an operation process information analyzing and updating means for analyzing said operation process information of said content information and updating said operation process information.

8. (Original) The multimedia information processing device according to claim 7, which further comprises an integrating means for integrating the content information from said content information editing and processing means, the internal structural information from said internal structural information analyzing and updating means, and the operation process information from said operation process information analyzing and updating means.

9. (Original) The multimedia information processing device according to claim 7, which further comprises:

an operation instruction information checking means for checking operation instruction information of said content information; and

an operation instruction information analyzing and updating means for analyzing said operation instruction information and updating said operation instruction information,

said content information editing and processing means deleting, restoring or adding a partial data of said content information based on results checked by said internal structural information checking means, said operation process information checking means, and said operation instruction information checking means.

10. (Original) The multimedia information processing device according to claim 9, which further comprises an integrating means for integrating the content information from said content information editing and processing means, the internal structural information from said internal structural information analyzing and updating means, the operation process information from said operation process information analyzing and updating means, and the operation instruction information from said operation instruction information analyzing and updating means.

11. (Original) The multimedia information processing device according to claim 1, which further comprises a data capacity checking means for checking whether a total amount of a data capacity of said content information is within a range of a predetermined capacity, and in which, when said total amount is larger than said predetermined capacity, a partial data of said content information is deleted.

12. (Original) The multimedia information processing device according to claim 1, which further comprises:

a user checking means for checking whether a user is a registered one when said content information is utilized;

a user registration processing means for registering said user when said user checking means determines that said user has not been registered;

a fee presentation means for indicating fees in accordance with said content information;

a fee payment means for paying said fees indicated by said fee presentation means;

a payment information checking means for checking whether said fees paid by said fee payment means are proper;

a fee imposing process means for imposing said fees when said fee payment information checking means determines that said fees paid by said fee payment means are correct; and

an information transmitting means for transmitting said content information when said fee payment information checking means determines that said fees paid by said fee payment means are correct.

13. (Original) The multimedia information processing device according to claim 1, which further comprises:

a user checking means for checking whether a user is a registered one when a partial data deleted from said content information is utilized;

a user registration processing means for registering said user when said user checking means determines that said user has not been registered;

a fee presentation means for indicating fees in accordance with said partial data;

a fee payment means for paying said fees indicated by said fee presentation means;

a payment information checking means for checking whether said fees paid by said fee payment means are proper;

a fee imposing process means for imposing said fees when said fee payment information checking means determines that said fees paid by said fee payment means are correct; and

an information transmitting means for transmitting said partial data when said fee payment information checking means determines that said fees paid by said fee payment means are correct.

14. (Original) The multimedia information processing device according to claim 12, which further comprises:

a content information producer terminal for producing said content information;

a content information control terminal for registering said content information produced by said content information producer terminal; and

a user terminal used by said user,

said content information control terminal including said user checking means, said user registration processing means, said fee presentation means, said payment information checking means, said fee imposing process means, and said information transmitting means, and

said user terminal including said fee payment means.

15. (Original) The multimedia information processing device according to claim 13, which further comprises:

a content information producer terminal for producing said content information;

a content information control terminal for registering said content information produced by said content information producer terminal; and

a user terminal used by said user,

said content information control terminal including said user checking means, said user registration processing means, said fee presentation means, said payment information checking means, said fee imposing process means, and said information transmitting means, and

said user terminal including said fee payment means.

16. (New) The multimedia information processing device of claim 1 wherein the operation process information comprises a lapse of time from generating said content information.

17. (New) The multimedia information processing device of claim 1 wherein the operation process information comprises a utilization frequency of said content information.

18. (New) The multimedia information processing device of claim 16 wherein the operation process information comprises a value of the content information that varies in accordance with the lapse of time.